

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
14 July 2005 (14.07.2005)

PCT

(10) International Publication Number  
WO 2005/064727 A2

(51) International Patent Classification: H01M 8/04,  
8/10, 8/24

(21) International Application Number:  
PCT/GB2004/005463

(22) International Filing Date:  
31 December 2004 (31.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0330272.6 31 December 2003 (31.12.2003) GB

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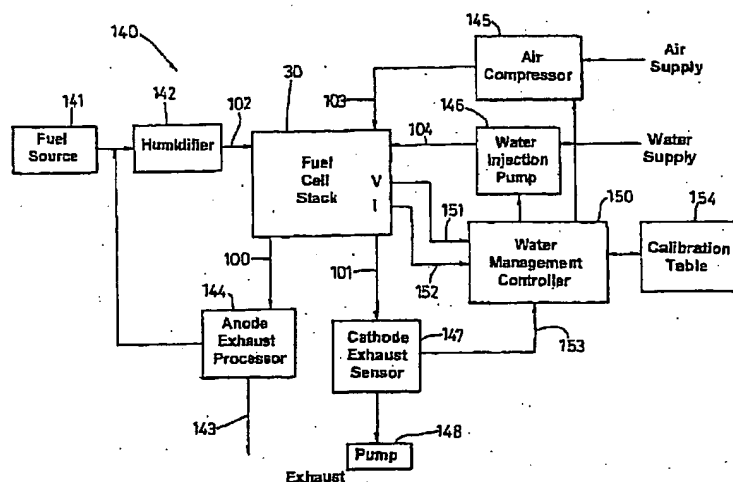
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(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,

[Continued on next page]

(54) Title: WATER MANAGEMENT IN FUEL CELLS



(57) Abstract: An electrochemical fuel cell having an anode, an ion transfer membrane and a cathode has liquid water delivered to the fluid flow channels within the cathode so as to maintain a relative humidity of 100 % throughout the fluid flow channels. A calibration method and apparatus is described for determining an optimum quantity or range of quantities of liquid water to be delivered to the cathode fluid flow channels under varying operating conditions. An operating method and apparatus is described that ensures an optimum quantity of liquid water is delivered to the cathode fluid flow channels under varying operating conditions.



TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,

Published:

— without international search report and to be republished upon receipt of that report

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